

Endangered Species Act Biological Evaluation Form

Deepwater Horizon Oil Spill Restoration

Fish and Wildlife Service & National Marine Fisheries Service

This form will be used to provide information for the initiation of informal Section 7 consultations under the Endangered Species Act, if required, or to document a No Effect determination. In addition, information provided in this form may be used to inform other regulatory compliance processes such as Essential Fish Habitat (EFH), Marine Mammal Protection Act (MMPA), Section 106 of the National Historic Preservation Act (NHPA), Migratory Bird Treaty Act (MBTA), and Bald and Golden Eagle Protection Act (BGEPA). Further information may be required beyond what is captured in this form. Note: if you need additional space for writing, please attach pages as needed.

A. Project Identification

<i>Lead Agency</i>			
U.S. Fish and Wildlife Service/National Marine Fisheries Service		<i>Phone</i>	<i>Email</i>
<i>Agency Contact Person</i>		812-756-2712 and	Ashley_Mills@fws.gov and
Ashley Mills and Laurel Jennings		206-526-4601	Laurel.Jennings@noaa.gov
<i>I. Applicant Agency or Business Name</i>			
Florida Department of Environmental Protection			
<i>II. Applicant Contact Person</i>	<i>III. Phone</i>	<i>Email</i>	
Gareth Leonard	(850) 245-2222	Gareth.Leonard@dep.state.fl.us	
<i>IV. Project Name and ID# (Official name of project and ID number assigned by action agency)</i>			
Florida Coastal Access Project- Lynn Haven Preserve and Park			
<i>V. Project Type #1</i>		<i>Project Type #2, if helpful</i>	
Land Acquisition and Management		General Construction/Building	
<i>VI. NMFS Office (Choose appropriate office based on project location)</i>			
NMFS Southeast Regional Office			
<i>VII. FWS Office (Choose appropriate office based on project location)</i>			
Panama City Ecological Services Field Office (Panama City)			

B. Project Location

<i>I. Physical Address of action area (If applicable)</i>
Lynn Haven on northeast North Bay and McKitchen's Bayou
<i>II. State & County/Parish of action area</i>
Bay County, Florida
<i>III. Latitude & Longitude for action area (Decimal degrees and datum [e.g., 27.71622°N, 80.25174°W NAD83] [online conversion: https://www.fcc.gov/encyclopedia/degrees-minutes-seconds-to-from-decimal-degrees])</i>
30.257436°N, 85.605229°W WGS84
<i>IV. Township, range and section of the action area</i>
Township 3 South, Range 14, Section 1.

C. Description of Action Area

1. Attach a separate map delineating where the action will occur. 2. Describe ALL areas that may be affected directly or indirectly by the action and not merely the immediate action area involved in the action, or just where species or critical habitat may be present. Provide a description of the existing environmental conditions and characteristics (e.g., topography, vegetation type, soil type, substrate type, water quality, water depth, tidal/riverine/estuarine, hydrology and drainage patterns, current flow and direction), and land uses (e.g., public, residential, commercial, industrial, agricultural). 3. If habitat for species is present in the action area, provide a general description of the current state of the habitat. 4. Identify any management or other activities already occurring in the area. 5. Provide or attach a detailed map of the area of potential effect for ground disturbing activities if the area is different from the action area.

1. This project site action area is identified in Attachment A, Figures 1-3.

2. The proposed Lynn Haven Preserve and Park site is located within Bay County and is an approximately 90.7 acre undeveloped tract of land (see Figure 3-4 and Figure 3-8). The property includes 1,650 linear feet of frontage on North Bay (marine environment) and 3,570 linear feet of frontage along McKitchen's Bayou (brackish) and its unnamed source creek. This source creek is likely minimally tidally influenced, if at all, but is likely to have higher flow following storm events. The property is a cut-out from a larger commercially owned property and would be accessed via a road easement to a public right of way. There is currently no public access to the site and a gate bars entrance to the property's dirt road which is connected to the nearby Deer Point Elementary School's access road. The current dirt access road will be paved as part of this project. The new road will be a two lane paved road, approximately 22-24' wide, with one culvert bridge over a small creek.

The site owner currently maintains the site through regular mowing of many areas. Satellite imagery show dirt roads used for property maintenance throughout the site (Attachment A: Figure 3). Per a recent wetlands survey, the property includes approximately 59 acres of upland habitat and 32 acres of wetlands. Tree cover includes hammocks of oaks and pine with magnolia (Attachment A: Figures 5-9). There are no seagrasses in the water at this site.

The proposed Lynn Haven Preserve and Park site is located within Bay County in the Florida Panhandle against an eastern shore of North Bay (in St. Andrew Bay), south of Route 77A. This site is predominantly flat. No previous development has occurred onsite, but there is development directly adjacent to the proposed site area (e.g., existing road). Soils in the site area have been classified by USDA NRCS as Chipley sand, Osier fine sand, Leon sand, Pamlico-Dorovan complex, Dirego muck, and Rutledge sand soil types. These soil types are composed primarily of sand with some portions of fine sand and muck, are flat with slight slopes, have poor and very poor drainage, are classified as having negligible to very high runoff, and have infrequent flooding and ponding. This site is located in an area with historic longleaf pines. St. Andrew Bay substrate is characterized by post-Pleistocene sands, silt, clay and organics. Typical vegetation on the marine intertidal wetlands includes emergent vegetation (perennial plants, rooted, herbaceous hydrophytes: excluding mosses and lichens). Vegetation includes scrub oak, pine, oak hammocks, magnolia trees, and wetland vegetation. Typical vegetation on the marine intertidal wetlands includes emergent vegetation (perennial plants, rooted, herbaceous hydrophytes: excluding mosses and lichens). Vegetation on the freshwater emergent wetlands in the Palustrine wetland system includes trees, shrubs, emergents, mosses or lichens, woody vegetation (scrub-shrub), and woody angiosperms (i.e., trees or shrubs). Vegetation on the freshwater forested/shrub wetland in the Palustrine wetland system includes freshwater emergent wetlands as well as woody vegetation such as Needle-leaved Evergreens (i.e., black spruce, pond pine). Based on available information, there is likely no seagrass or SAV off of the Lynn Haven Preserve and Park site.

The proposed Lynn Haven Preserve and Park site is located along the eastern coast of the North Bay section of St. Andrew Bay. The St. Andrew Bay watershed encompasses about 1,149 square miles in Bay County. The Bay has a low flushing rate and relatively low freshwater inflow due to the lack of a major river entering the Bay. North Bay is an estuarine habitat. Salinity in North Bay ranges from 0 – 32 ppt in the vicinity of the project site: surface salinities average 15 ppt, and bottom salinities average 25 ppt. Depths in St. Andrew Bay commonly reach 12 meters. This project site is located in FEMA designated Flood Zones according to the Flood Map Service. The site is located in three zones, Zone A with no base flood elevation, Zone AE with a base flood elevation of seven and eight feet in areas, and Zone X outside the 0.2 percent annual chance floodplain. The property includes approximately 58.5 acres of upland habitat and 32.2 acres of estuarine wetlands. The eastern shore of North Bay is highly urbanized, specifically in the proposed Lynn Haven Preserve and Park area. Water quality impairments result from urban runoff and historical wastewater treatment outfalls. The northern segment of St. Andrew Bay is listed as a 303d impaired waterbody for mercury in fish tissue, bacteria in shellfish, dissolved oxygen (nutrients, biological oxygen demand), and fecal coliform. St. Andrew Bay is not listed as one of Florida's Outstanding Waters.

The property is currently zoned Mill Bayou Traditional Neighborhood Development District, which permits marinas, hotels, condominiums, town centers, sports centers, public or civic uses, projects servicing commercial properties, single and multi-family residential units, and timeshares.

3. While the action area may provide habitat for listed species, no listed species are known to occur in the action area. Potentially affected species are described in Sections E-J.

4. This property has been in private ownership for many years, and as part of this action, is proposed to be acquired through a partnership between the Florida trustees and the Trust for Public Lands and then donated to the City of Lynn Haven. Regular site maintenance (mowing, etc) has been ongoing.

5. The area of potential effect is not expected to fall outside of the immediate site area. See Attachment A: Figures 1, 4.

a. *Waterbody*
(If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If the location is in a river or estuary, please approximate the navigable distance from the project location to the marine environment.)

The proposed Lynn Haven Preserve and Park site is located along the eastern coast of the North Bay section of St. Andrew Bay (estuarine environment). The property includes 1,650 linear feet of frontage on North Bay (marine environment) and 3,570 linear feet of frontage along McKitchen's Bayou (brackish) and its unnamed source creek. Per a recent wetlands survey, the property includes approximately 59 acres of upland habitat and 32 acres of wetlands.

b. *Existing Structures*
(If applicable. Describe the current and historical structures found in the action area (e.g., buildings, parking lots, docks, seawalls, groynes, jetties, marina.)). If known, please provide the years of construction.

There are no existing structures on the site. There is currently no public access to the site and a gate bars entrance to the property's dirt road which is connected to the nearby Deer Point Elementary School's access road. The site owner currently maintains the site through regular mowing of many areas. Satellite imagery show dirt roads used for property maintenance throughout the site.

c. *Seagrasses & Other Marine Vegetation*
(If applicable. Describe seagrasses found in action area. If a benthic survey was done, provide the date it was completed and a copy of the report. Estimate the species area of coverage and density. Attach a separate map showing the location of the seagrasses in the action area.)

There is no submerged aquatic vegetation off of this parcel.

d. *Mangroves*
(If applicable. Describe the mangroves found in action area. Indicate the species found (red, black, white), the species area of coverage in square footage and linear footage along project shoreline. Attach a separate map showing the location of the mangroves in the action area.)

Not applicable.

e. *Corals*
(If applicable. Describe the corals found in action area. If a benthic survey was done, provide the date it was completed and a copy of the report. Estimate the species area of coverage and density. Attach a separate map showing the location of the corals in the action area.)

Not applicable.

f. *Uplands*
(If applicable. Describe the current terrestrial habitat in which the project is located (e.g. pasture, forest, meadows, beach and dune habitats, etc.).

Vegetation includes scrub oak, pine, oak hammocks, magnolia trees, and wetland vegetation. There are wetlands on site. The property includes approximately 58.5 acres of upland habitat and 32.2 acres of wetlands, per recent wetland delineation. Current low brush is mowed and maintained.

D. Project Description

I. Construction Schedule (What is the anticipated schedule for major phases of work? Include duration of in-water work.)

Installation of the proposed site improvements is estimated to take 12-15 months; construction of an off-site road and bridge that will be required to access the site is anticipated to add three months to the project timeframe. The specific schedule for construction has not been established, as the project is only at a conceptual design phase at this time (Attachment A: Figure 4).

II. Describe the Proposed Action: 1. What is the purpose and need of the proposed action? 2. How do you plan to accomplish it? Describe in detail the construction equipment and methods** needed; permanent vs. temporary impacts; duration of temporary impacts; dust, erosion, and sedimentation controls; restoration areas; if the project is growth-inducing or facilitates growth; whether the project is part of a larger project or plan; and what permits will need to be obtained. 3. Attach a separate map showing project footprint, avoidance areas, construction accesses, staging/laydown areas. **If construction involves overwater structures, pilings and sheetpiles, boat slips, boat ramps, shoreline armoring, dredging, blasting, or artificial reefs, list the method here, but complete the next section(s) in detail.

The Florida Coastal Access Project: Lynn Haven Preserve and Park will be performed in two stages: (1) the acquisition of the coastal parcel and (2) the final design and construction of the park infrastructure and amenities. The second stage is detailed in Attachment B.

III. *Specific In-Water and/or Terrestrial Construction Methods (Provide a detailed account of construction methods. It is important to include step-by-step descriptions of how demolition or removal of structures is conducted and if any debris will be moved and how. Describe how construction will be implemented, what type and size of materials will be used and if machines will be used, manual labor, or both. Indicate if work will be done from upland, barge, or both.)*

a. *Overwater Structures (Place your answers to the following questions in the box below.)*

- Is the proposed use of this structure for a docking facility or an observation platform?*
- If no, is this a fishing pier? Public or Private? How many people are expected to fish per day? How do you plan to address hook and line captures?*
- Use of "Dock Construction Guidelines"? <http://sero.nmfs.noaa.gov/pr/endaangered%20species/Section%207/DockGuidelines.pdf>*
- Type of decking: Grated – 43% open space; Wooden planks or composite planks – proposed spacing?*
- Height above Mean High Water (MHW) elevation?*
- Directional orientation of main axis of dock?*
- Overwater area (sqft)?*
- Use of "Sea Turtle and Smalltooth Sawfish Construction Conditions, March 2006"? <http://sero.nmfs.noaa.gov/pr/endaangered%20species/Sea%20Turtle%20and%20Smalltooth%20Sawfish%20Construction%20Conditions%203-23-06.pdf>*

i. This project includes construction of four docks. Dock 1 is a motorized boat dock (dock numbering moves from the southwest of the site in North Bay to the northeast in McKitchen's Bayou; Attachment A: Figure 4). Dock 2 is a fishing dock with paddle craft launch. Dock 3 is a fishing dock with shade structure. Dock 4 is a dock with paddle craft access. The design specifications are provided in Attachment B. New pilings will need to be installed for each dock. The proposed docks would be ADA compliant. There will be a culvert bridge constructed along the access road to the proposed park. This bridge will not require any in-water work. ii. Dock 1 will be a docking facility (boat access to the park only, no vehicle boat drop-off access). Docks 2, 3, and 4 will be fishing piers (docks). Site visitation is expected to vary with fishing seasons. There are three parking lots at the site with capacity for approximately 205 vehicles. No fish cleaning stations are included in the plan. Any hook and line captures of listed species must be reported. iii. Yes, USACE and NMFS dock construction guidelines will be followed

b. *Pilings & Sheetpiles (What type of material is the piling or sheetpiles? What size and how many will be used? Method used to install: impact hammer, vibratory hammer, jetting, etc.?)*

The specific schedule for construction has not been established, as the project is only at a conceptual design phase at this time. The current plan calls for installation for dock pilings at four docks (see above). All dock/pier work will need installation of new pilings. Dock construction would likely include placement of new piles (two approximately 8" pilings for every 10 feet of dock) using the least invasive techniques possible given substrate and construction cost considerations, e.g., jetting, pushing, or driving the piles. Materials will be made from natural (i.e., wood) or composite materials.

This proposed project would include the paving of an access road outside of the proposed project site, which would include the construction of a small bridge (culvert bridge). A park road is also planned on the site. Additional infrastructure including four restroom facilities and an outdoor classroom would be constructed on the property and would require connection to

c. *Boat Slips (Describe the number and size of slips and if the number of new slips changes from what is currently available at the project. Indicate how many are wet slips and how many are dry slips. Estimate the shadow effect of the boats - the area (sqft) beneath the boats that will be shaded.)*

The number of boat slips for Dock 1 is unknown and will depend on final design plan. All boat docking areas on Dock 1 will be wet slip. The approximate shadow effect of the boats and dock is approximately 10,000 square feet.

d. *Boat Ramp (Describe the number and size of boat ramps, the number of vessels that can be moored at the site (e.g., staging area) and if this is a public or private ramp. Indicate the boat trailer parking lot capacity, and if this number changes from what is currently available at the project.)*

Not applicable.

- e. *Shoreline Armoring (This includes all manner of shoreline armoring (e.g., riprap, seawalls, jetties, groins, breakwaters, etc.). Provide specific information on material and construction methodology used to install the shoreline armoring materials. Include linear footage and square footage. Attach a separate map showing the location of the shoreline armoring in the action area.)*

Not applicable.

- f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft²) to be dredged, volume of material (yd³) to be produced, grain size of material, sediment testing for contamination, spoil disposition plans, and hydrodynamic description (average current speed/direction)). If digging in the terrestrial environment, please describe fully with details about possible water jetting, vibration methods to install pilings for dune walk-over structure, or other methods.*

In-water dredging or digging associated with installation of the pilings for the docks is not anticipated, though substrate displacement and compaction from dock piling installation is expected in the two dock areas on the Bay front and the two areas on the Bayou. Depth will be subject to final design, but there will be less than 70 square feet of substrate displaced from pilings in the marine/estuarine environment (see Attachment B for design specifications).

Digging would also occur in the terrestrial environment to auger holes for installation of support structures (if needed) for the raised Bayou boardwalk (~300 linear feet). Digging would also occur if engineering designs determine that a stormwater pond (s) is necessary to control runoff from the gravel parking areas, this is estimated to be 8,000 cubic yards of excavation. There are bathrooms proposed on-site which would need connections to municipal water and sewer; this is anticipated to be 3,400

- g. *Blasting (Projects that use blasting might not qualify as "minor projects," and a Biological Assessment (BA) may need to be prepared for the project. Arrange a technical consultation meeting with NMFS Protected Resources Division to determine if a BA is necessary. Please include explosive weights and blasting plan.)*

Not applicable.

- h. *Artificial Reefs (Provide a detailed account of the artificial reef site selection and reef establishment decisions (i.e., management and siting considerations, stakeholder considerations, environmental considerations), deployment schedule, materials used, deployment methods, as well as final depth profile and overhead clearance for vessel traffic. For additional information and detailed guidance on artificial reefs, please refer to the artificial reef program websites for the particular state the project will occur in.*

Not applicable.

E. Species & Critical Habitat

1. List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.
2. Attach a separate map identifying species/critical habitat locations within the action area.

For information on species and critical habitat under FWS jurisdiction, visit <http://www.fws.gov/endangered/species/>. Under NMFS jurisdiction, visit: http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/Documents/gulf_of_mexico.pdf.

Identify if gulf sturgeon are in saltwater, estuarine, or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. gulf sturgeon CH - saltwater). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

SPECIES and/or CRITICAL HABITAT (CH)	LOCATION (for sea turtles and gulf sturgeon only)	STATUS	CH UNIT
Gulf sturgeon	Marine	Threatened	
West Indian Manatee	Select One	Endangered	
Green sea turtle	Marine	Endangered	
Hawksbill sea turtle	Marine	Endangered	
Kemp's ridley sea turtle	Marine	Endangered	
Leatherback sea turtle	Marine	Endangered	
Loggerhead sea turtle	Marine	Threatened	
Florida skullcap	Select One	Threatened	
Godfrey's butterwort	Select One	Threatened	
Papery whitlow-wort	Select One	Threatened	
Telephus spurge	Select One	Threatened	
White birds-in-a-nest	Select One	Threatened	
Harper's beauty	Select One	Endangered	
	Select One	Select One	
	Select One	Select One	
No critical habitat	Select One	Select One	

F. Effects of the Proposed Project

- I. *Explain the potential beneficial and adverse effects to each species listed above (Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, interdependent, interrelated, connected actions, and cumulative impacts. Where possible, quantify effects. If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.)*

We anticipate that the acquisition of this parcel will be wholly beneficial. There may be beneficial and adverse effects to listed species from the recreational improvements and paving of the access road, as described below.

Gulf sturgeon. The Gulf sturgeon inhabits coastal waters and freshwater river systems of the northern Gulf of Mexico. Gulf sturgeon are usually located in areas 2-4 meters deep with high sand substrate. There is no critical habitat for Gulf sturgeon at this site, but there is the potential for Gulf sturgeon to be in the waters during the time of construction. It is unlikely that Gulf sturgeon would be present in the unnamed tributary creek to McKitchen's Bayou, because of the creek's small size. Potential impacts to the Gulf sturgeon include elevated noise levels and the presence of suspended sediments in the water column during dock construction. This species is mobile and would likely exit the area during construction. As a result of construction activities conducted in the water and anticipated recreational uses after completion, this proposed project may have direct or indirect adverse effects on Gulf sturgeon. Adverse effects from construction will be avoided or minimized by using conservation measures and BMPs in Section G.

Sea turtles. There is in-water work (e.g., dock construction, piling installation) proposed for this site. The project location does not intersect with any identified sea turtle critical habitat in water or on land. The location of the site in North Bay is part of the estuary with brackish water, so turtles could be present in the vicinity of the site, but it is not likely. Additionally, the range of sea turtles suggests they could occur in the project area, although the site lacks suitable nesting habitat. In addition, the turtles' ability to avoid the general activity in the area may make them less likely to be affected by construction activities. As a result of construction related activities from dock construction and anticipated recreational uses of docks, this project may have direct or indirect adverse effects on sea turtles. However, due to the implementation of BMPs and because sea turtles are known to avoid areas with high human activity when given the opportunity, impacts will be minimized. Adverse effects from construction will be avoided or minimized by using conservation measures and BMPs in Section G.

West Indian manatee. The West Indian manatee inhabits freshwater, brackish, and marine environments. It typically occurs in coastal and inland tidal rivers and streams, mangrove swamps, salt marshes, freshwater springs, canals, lagoons, and vegetated bottoms. It moves to warm-water sites, including industrial warm-water discharges, during the winter. The project location does not intersect with any identified critical habitat for the West Indian manatee. Marine mammals are affected by vibrations resulting from construction activities (e.g., generators, pile drivers, etc.). If manatees are present, in-water construction work could cause a manatee to startle or be struck. There is proposed in-water work (e.g., driving or pushing pilings) at this site. Accordingly, as a result of construction related activities from dock construction and, if pilings are installed using pile drivers or vibratory hammers, this project may have direct and/or indirect short-term adverse effects on the West Indian manatee and other marine mammals. Placement of the dock piles is expected to be done using the least disturbing techniques given substrate, environment, and construction cost considerations (e.g., jetting).

- II. *Explain the potential beneficial and adverse effects to critical habitat listed above (Describe what, when, and how the critical habitat will be impacted and the likely response to the impact. Be sure to include direct, indirect, interdependent, interrelated, connected actions, and cumulative impacts. Where possible, quantify effects (e.g. acres of habitat, miles of habitat). Describe your rationale if designated or proposed critical habitats are present and will not be adversely affected.*

There is no designated marine or terrestrial critical habitat in the action area for any species.

G. Actions to Reduce Adverse Effects

<p>I.</p>	<p><i>Explain the actions to reduce adverse effects to each species listed above (For each species for which impacts were identified, describe any conservation measures (e.g. BMPs) that will be implemented to avoid or minimize the impacts. Conservation measures are designed to avoid or minimize effects to listed species and critical habitats or further the recovery of the species under review. Conservation measures are considered part of the proposed action and their implementation is required. Any changes to, modifications of, or failure to implement these conservation measures may result in a need to reinitiate this consultation.)</i></p> <p>The preservation and restoration of over half of the area at this site will help to reduce any adverse effects to listed species at or around this site. After construction, the presence of the motorized boat dock will likely increase boat traffic in the vicinity of the park resulting in minimal impacts to surface water quality. Boat wakes created by additional boat traffic that could increase shoreline erosion will be minimized through no-wake or speed zones to mitigate shoreline erosion.</p> <p>Gulf sturgeon. Impacts to the Gulf sturgeon will be avoided and minimized by implementation of BMPs during ground disturbance activities that will reduce sediment and nutrient inputs to streams, minimize disturbance to riparian zone vegetation within 100 feet of the streambank in occupied habitat, and revegetate disturbed areas with native vegetation. All work will take place in less than 1.5 meters of water and in areas of silty sand to marshy shorelines. Additionally, these species are known to avoid area of high human activity when given the opportunity. Work will most likely take place during the spring and summer months when Gulf sturgeon are not likely to be present in inshore waters. If construction activity occurs when Gulf sturgeon are present, additional adverse impact reduction strategies would include the following:</p> <ul style="list-style-type: none"> • Control turbidity levels through the use of floating turbidity screens during in-water construction; • Implement the Sea Turtle and Smalltooth Construction Conditions, Revised: March 23, 2006 and Measures for Reducing Entrapment Risk to Protected Species, Revised: May 22, 2012 as they are protective of Gulf sturgeon as well. <p>Sea turtles and manatees. To reduce the risk of adverse impacts to an insignificant or discountable level, the best management practices identified within the Sea Turtle and Smalltooth Sawfish Construction Conditions and the Standard Manatee Conditions for In-Water Work (USFWS 2011) will be implemented and adhered to during periods of in-water work. As noted in these documents, these conditions require stopping operation of any equipment if sea turtles or smalltooth sawfish come within 50 feet of the equipment until the animals leave the project area of their own volition. Pending regulatory consultation on final design, marine mammal and sea turtle conservation measures could include posting of educational signage detailing what to do if sea turtles or marine mammals are spotted in the vicinity, or what to do in the event that there is an incidental hooking. There is the possibility to enlist these docks in Florida's Responsible Pier Initiative Program (a program through the Loggerhead Marinelife Center that adds signage to fishing piers, hosts first responder trainings, and conducts underwater clean-ups around piers). Additional conservation measures for sea turtles could include the use of wildlife friendly lighting if lights are required for docks. Lighting could be required for boater safety. The lighting would be wildlife friendly, consisting of solar LED lights.</p> <p>Plants (Florida skullcap, Godfrey's butterwort, papery whitlow-wort, Telephus spurge, white birds-in-a-nest, and Harper's beauty). If these plant species are found on site, an FWS Botanist will be contacted and appropriate measures to avoid or minimize impacts to these species will be incorporated into the project.</p>
<p>II.</p>	<p><i>Explain the actions to reduce adverse effects to critical habitat listed above (For critical habitat for which impacts were identified, describe any conservation measures (e.g. BMPs) that will be implemented to avoid or minimize the impacts. Conservation measures are designed to avoid or minimize effects to listed species and critical habitats or further the recovery of the species under review. Conservation measures are considered part of the proposed action and their implementation is required. Any changes to, modifications of, or failure to implement these conservation measures may result in a need to reinitiate this consultation.)</i></p> <p>There is no designated critical habitat in the action area.</p>

H. Effect Determination Requested

From the sections above, there should be enough detailed information to provide clear and obvious support for your determinations in the section below. If the rationale for the determination is not clear, additional information must be added to one of the sections. Identify if gulf sturgeon are in saltwater, estuarine, or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. gulf sturgeon CH - saltwater). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

SPECIES and/or CRITICAL HABITAT	LOCATION (for sea turtles and gulf sturgeon only)	DETERMINATION (see definitions below)
Gulf sturgeon	Marine	May Affect, Not Likely to Adversely Affect
West Indian manatee	Select One	May Affect, Not Likely to Adversely Affect
Green sea turtle	Marine	May Affect, Not Likely to Adversely Affect
Hawksbill sea turtle	Marine	May Affect, Not Likely to Adversely Affect
Kemp's ridley sea turtle	Marine	May Affect, Not Likely to Adversely Affect
Leatherback sea turtle	Marine	May Affect, Not Likely to Adversely Affect
Loggerhead sea turtle	Marine	May Affect, Not Likely to Adversely Affect
Florida skullcap	Select One	May Affect, Not Likely to Adversely Affect
Godfrey's butterwort	Select One	May Affect, Not Likely to Adversely Affect
Papery whitlow-wort	Select One	May Affect, Not Likely to Adversely Affect
Telephus spurge	Select One	May Affect, Not Likely to Adversely Affect
White birds-in-a-nest	Select One	May Affect, Not Likely to Adversely Affect
Harper's beauty	Select One	May Affect, Not Likely to Adversely Affect
	Select One	Select Most Appropriate
	Select One	Select Most Appropriate
	Select One	Select Most Appropriate

NE = no effect. This determination is appropriate when the proposed action will not directly, indirectly, or cumulatively impact, either positively or negatively, any listed, proposed, candidate species or designated/proposed critical habitat.

NLAA = not likely to adversely affect. This determination is appropriate when the proposed action is not likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat or there may be beneficial effects to these resources. Response requested is "Concurrence." This conclusion is appropriate when effects to the species or critical habitat will be beneficial, discountable, or insignificant. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact, while discountable effects are those that are extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. If the Services concur in writing with the Action Agency's determination of "is not likely to adversely affect" listed species or critical habitat, the section 7 consultation process is completed.

LAA = likely to adversely affect. This determination is appropriate when the proposed action is likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat. Response requested for listed species is "Formal Consultation". Response requested for proposed and candidate species is "Conference." This conclusion is reached if any adverse effect to listed species or critical habitat may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable or insignificant. In the event the overall effect of the proposed action is beneficial to the listed species or critical habitat, but may also cause some adverse effect on individuals of the listed species or segments of the critical habitat, then the determination should be "is likely to adversely affect." Such a determination requires formal section 7 consultation and will require additional information.

JP = likely to jeopardize proposed species/adversely modify proposed critical habitat. For proposed species and proposed critical habitats, the Service is required to evaluate whether the proposed action is likely to jeopardize the continued existence of the proposed species or adversely modify an area proposed for designation as critical habitat. If you reach this conclusion, a section 7 conference is required.

JC = likely to jeopardize candidate species. For candidate species, the Service is required to evaluate whether the proposed action is likely to jeopardize the continued existence of the candidate species. If this conclusion is reached, intra-Service section 7 conference is required.

Critical Habitat = No destruction or adverse modification. This determination is appropriate when the proposed action will have no direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

I. Bald Eagles

Are bald eagles present in the action area? ☒ NO ☐ YES

If YES, the following conservation measures should be implemented:

1. If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, all activities (e.g., walking, camping, clean-up, use of a UTV, ATV, or boat) should avoid the nest by a minimum of 660 feet. If the nest is protected by a vegetated buffer where there is *no* line of sight to the nest, then the minimum avoidance distance is 330 feet. This avoidance distance shall be maintained from the onset of breeding/courtship behaviors until any eggs have hatched and eaglets have fledged (approximately 6 months).
2. If a similar activity (e.g., driving on a roadway) is closer than 660 feet to a nest, then you may maintain a distance buffer as close to the nest as the existing tolerated activity.
3. If a vegetated buffer is present and there is no line of sight to the nest and a similar activity is closer than 330 feet to a nest, then you may maintain a distance buffer as close to the nest as the existing tolerated activity.
4. In some instances, activities conducted at a distance greater than 660 feet of a nest may result in disturbance. If an activity appears to cause initial disturbance, the activity shall stop and all individuals and equipment will be moved away until the eagles are no longer displaying disturbance behaviors.

Will you implement the above measures? ☐ NO ☐ YES

If these measures cannot be implemented, then you must contact the Service's Migratory Bird Permit Office.

Texas – (505) 248-7882 or by email: permitsR2MB@fws.gov

Louisiana, Mississippi, Alabama, Florida – (404) 679-7070 or by email: permitsR4MB@fws.gov

J. Migratory Birds

Identify the species anticipated in the action area and behaviors (breeding, roosting, foraging) anticipated during project implementation. You may list similar species on a single line and categorize by type (e.g., Wading birds - great blue heron, snowy egret, reddish egret). If species or habitat impacts could occur, identify avoidance and minimization measures to prevent incidental take. Incidental take of Migratory Birds cannot be authorized. Use additional tables on the next page if needed.

I.

<u>Species/Species Group</u>	<u>Behavior</u>	<u>Species/Habitat Impacts and Conservation Measures to Minimize Impacts</u>
Wading Birds (e.g., herons, egrets, and rails)	Wading Birds- breeding, foraging, wintering, roosting	<p>Wading birds primarily forage and feed at the water's edge in fresh, brackish and saltwater marshes and tidal flats, thus they could be at the site. Noise and disturbance may cause birds to avoid the action area during construction. They would be expected to move to another nearby location to continue foraging, feeding and resting. These birds primarily nest and roost in isolated trees, shrubs (e.g., pines, mangroves), dunes or islands. There are trees and shoreline vegetation at the water's edge, where wading birds could be located. There is minimal to no tree removal expected from the site improvements and there are no known rookeries on site, so no impacts to nesting and roosting wading birds are anticipated.</p> <p>Care would be taken to minimize noise and vibration near areas where foraging or resting birds are encountered. All disturbances would be localized and temporary. Roosting would not be affected because the proposed construction would occur during daylight hours only. No take of wading birds is anticipated.</p>
Shorebirds (e.g., plovers and terns)	Shorebirds- breeding, foraging, wintering, roosting	<p>Shorebirds could occasionally forage, feed, rest, and roost in the project area. As such, they may be impacted locally and temporarily by the project. It is expected that they would be able to move to another nearby location to continue foraging, feeding and resting. These birds primarily nest and roost in the dunes and sand beaches. The action area does not include dune habitat, but there is some minimal beach habitat. There are no known shorebird nests on site. The proposed project would not affect roosting at this site because construction activities would occur during daylight hours only. No impacts to nesting and roosting shorebirds are anticipated.</p> <p>Care would be taken to minimize noise and vibration near areas where foraging or resting birds are encountered. All disturbances would be localized and temporary. Therefore, no take of shorebirds is anticipated.</p>

Migratory Birds

Continuation page if needed.

II.	SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS and CONSERVATION MEASURES TO MINIMIZE IMPACTS
	Raptors (e.g., falcons, hawks, and kites)	Raptors- breeding, foraging, wintering, roosting	<p>Raptors could forage and rest in the action area. As such, they may be impacted locally and temporarily by the proposed project. It is expected that they would be able to move to another nearby location to continue foraging and resting. These birds primarily nest and roost in trees. There are no known raptor nests on site. The proposed project would not affect roosting at this site because construction activities would occur during daylight hours only. There is minimal to no tree removal expected from the site improvements and there are no known nests on site, so no impacts to nesting and roosting are anticipated.</p> <p>Care would be taken to minimize noise and vibration near areas where foraging or resting birds are encountered. All disturbances would be localized and temporary. Therefore, no take of raptors is anticipated.</p>
	Songbirds (e.g., sparrows, warblers, and woodpeckers)	<p>Songbirds- breeding, foraging, wintering, roosting</p> <p>General impact reduction methods for all birds.</p>	<p>Songbirds could forage, rest and nest in the project area. Songbirds would be able to avoid the construction area and move to another nearby location to continue foraging and resting. Construction would only occur during daylight hours. If work must be done when songbirds are nesting, nest surveys will be completed prior to any tree/shrub removal and any trees/shrubs with active nests will be flagged and avoided. For these reasons, no take of songbirds or their nests is anticipated.</p> <p>To the extent possible, construction activities will avoid specific habitat locations onsite if there are known nesting birds and avoid nesting seasons. Pre-construction nesting surveys for migratory birds and raptors will be conducted and if evidence of nesting is found, the Trustees will coordinate with the USFWS to develop and implement appropriate conservation measures. At a minimum, trees/shrubs with active nests will be flagged and avoided. To avoid or minimize impacts to migratory birds from increased human activity, trails will divert and concentrate recreational users away from any important nesting, foraging, or rookery locations including shorelines where shoreline restoration will occur. There will be minimal removal of trees. This project proposes minimal habitat fragmentation by improvements on existing areas of disturbance. Additionally, signage could be installed along trails, boardwalks, and picnic locations to provide users information on sensitive species in the area and actions to take to avoid or minimize impacts to sensitive species. Foraging and resting birds may temporarily be displaced during construction or recreation activities. Bird roosting will not be affected because construction activities and most human use will occur during daylight hours.</p>

Pre-existing NEPA Documents

Yes



No



Does this project have any pre-existing, site specific NEPA analysis? If YES, then provide final NEPA analysis, if not final then provide draft. If tiered from a programmatic EIS or EA, then provide the programmatic document or a link below.

Tiered from the Deepwater Horizon NRDA Early Restoration Phase III Early Restoration Plan/Programmatic Environmental Impact Statement.
<http://www.gulfsillrestoration.noaa.gov/restoration/early-restoration/phase-iii/>

NMFS ESA §7 Consultation

We request that all ESA §7 consultation requests/packages be submitted electronically to:

Laurel.Jennings@noaa.gov. Questions about consultation status may be directed to the same email address or by phone, 206-526-4601 or 206-794-4761 (cell).

FWS ESA § 7 Consultation

We request that all consultation requests/packages to FWS be submitted electronically to:

Ashley_Mills@fws.gov. You will be notified when we receive your Biological Evaluation. Upon receipt, we will conduct a preliminary review and provide any comments and feedback, including any requests for modifications or additional information. If modifications or additional information is necessary, we will work with you until the Biological Evaluation form is considered complete. Once complete, we will send your Biological Evaluation to the appropriate Field Office to conduct consultation. If you have questions about consultation status, please contact Ashley Mills by phone 812-756-2712 or email Ashley_Mills@fws.gov.

Name of Person Completing this Form:

Heather Ballesterio, Industrial Economics, Inc.

Name of Project Lead:

Date Form Completed:

12/18/2015

Date Form Updated:

12/23/15

Biological Evaluation for Florida Coastal Access Project: Lynn Haven Preserve and Park
Attachment A: Project Figures, Photos, and Conceptual Design



Figure 1: Lynn Haven Preserve and Park Parcel Location

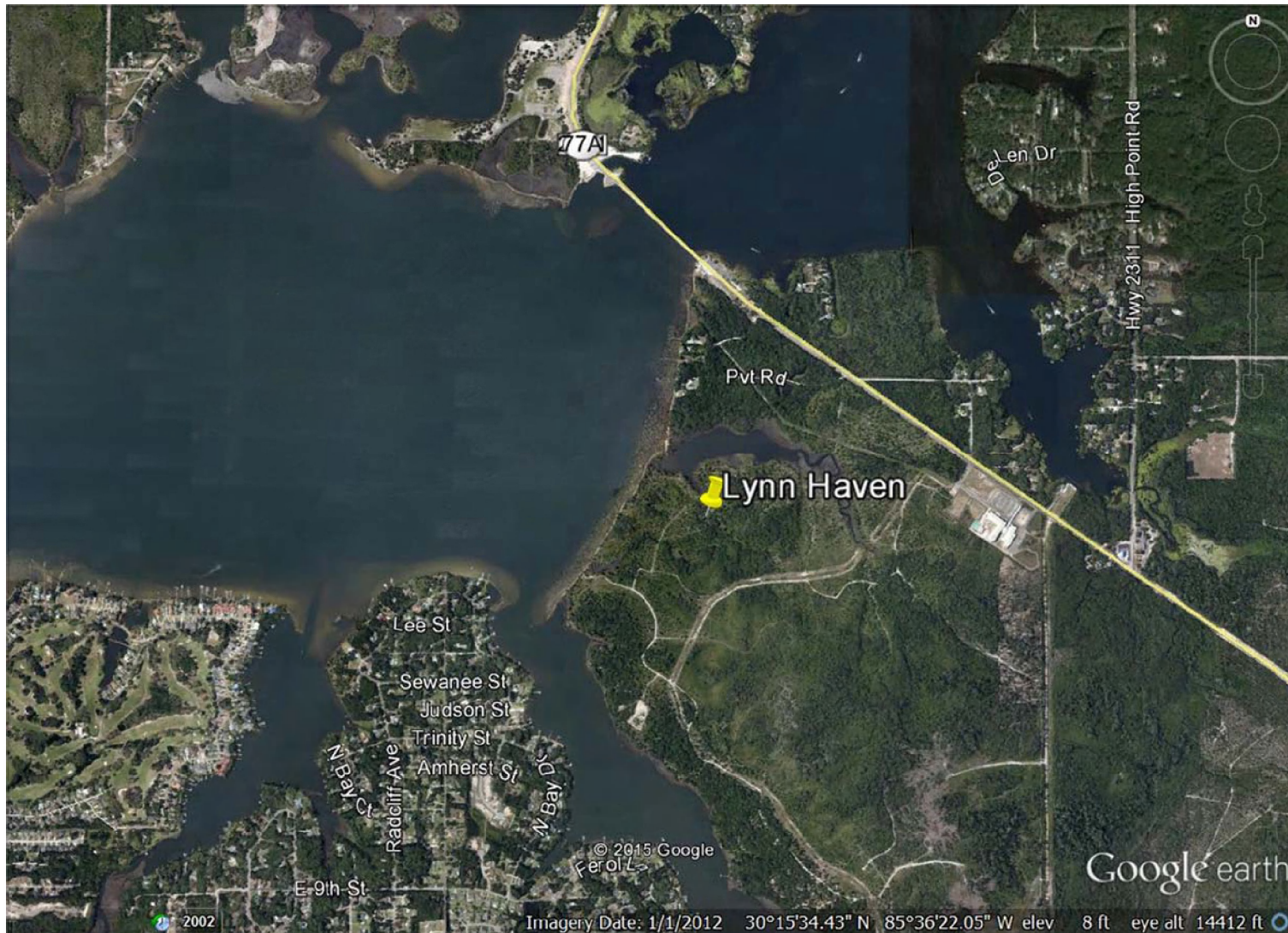


Figure 2: Lynn Haven Preserve and Park- 30°15'28.40"N 85°36'14.57"W



Figure 3: Proposed Location-Lynn Haven Preserve and Park- 30°15'28.40"N 85°36'14.57"W

Lynn Haven Bayou Park & Preserve

Conceptual Master Plan

November 2015



Figure 4: Lynn Haven Preserve and Park- Photo Locations (orange dots)



Figure 5: Lynn Haven Preserve and Park- Photo 1 looking west towards waterway



Figure 6: Lynn Haven Preserve and Park- Photo 2 looking south along waterfront



Figure 7: Lynn Haven Preserve and Park- Photo 3 looking west towards waterway



Figure 8: Lynn Haven Preserve and Park- Photo 4 looking north along waterway



Figure 9: Lynn Haven Preserve and Park- Photo 5 looking east towards property

Biological Evaluation for Florida Coastal Access Project: Lynn Haven Preserve and Park

Attachment B: Project Description.

The proposed Lynn Haven Preserve and Park site is located within Bay County and is an approximately 90.7 acre undeveloped tract of land (see Attachment A Figures 1, 5, 7, and 8). The property includes 1,650 linear feet of frontage on North Bay (marine environment) and 3,570 linear feet of frontage along McKitchen's Bayou (brackish) and its unnamed source creek. Per a recent wetlands survey, the property includes approximately 59 acres of upland habitat and 32 acres of wetlands. Tree cover includes hammocks of oaks and pine (see Attachment A Figures 5, 6, 7, 8, and 9) with magnolia. The property is a cut-out from a larger commercially owned property and would be accessed via a road easement to a public right of way. The property is currently zoned Mill Bayou Traditional Neighborhood Development District.

There is currently no public access to the site and a gate bars entrance to the property's dirt road which is connected to the nearby Deer Point Elementary School's access road. The site owner currently maintains the site through regular mowing of many areas. Satellite imagery show dirt roads used for property maintenance throughout the site (see Attachment A Figures 2 and 3).

As part of this plan, the proposed project site for the Lynn Haven Preserve and Park would be re-zoned from Mill Bayou Traditional Neighborhood Development District to "Recreation and Open Space District." The proposed park would be a daytime use park (i.e., sunrise to sunset). The specific site elements detailed in the proposed conceptual site plan (Attachment A Figure 4) include:

1. **Motorized Boat Dock.** The conceptual plan includes construction of a water access only, wooden boat dock for motorized boats that would be five feet wide and have wooden handrails. The dock would be approximately 525 feet long, with two bays, pending further surveys for submerged aquatic vegetation and consultations. Dock construction would likely include placement of new piles (two approximately 8" pilings for every 10 feet of dock) using the least invasive techniques given substrate and construction cost considerations, e.g., jetting, pushing, or driving the piles.
2. **Seven Small Picnic Pavilions** (sited throughout the property). Seven small (200 square feet) open air wooden picnic pavilions with grills and picnic tables would be constructed throughout the property. The structures would consist of basic wood frames to provide shade with concrete slabs beneath.
3. **Existing Oak Hammock.** Large areas of existing open oak hammock habitat would be preserved and maintained throughout the property including on the shoreward edge of the property.
4. **Limited Bay Shoreline Access.** The project may include some beach improvements such as vegetation clearing to allow shoreline access. This plan does not include creating a recreational beach area. Any shoreline improvements would be contingent on maintaining and preserving wetland water quality.
5. **Vehicular Drop-off Loop for Paddle Craft.** The vehicular access road would stop approximately 75 feet from the bay shoreline, where a road loop would be created to allow paddle craft drop off. The paved road would be approximately 10 feet wide. The loop would be approximately 150 feet in diameter.
6. **Fishing Dock with Paddle Craft Launch.** On the Bay shore, a wooden fishing/paddle dock would be constructed of approximately 200 feet in length, pending additional submerged aquatic vegetation surveys and consultations. Dock construction would include placement of new piles (two approximately 8" pilings for every 10 feet of dock) using the least invasive techniques given substrate and construction cost considerations, e.g., jetting, pushing, or driving the piles.

7. **Restrooms.** Three restroom buildings would be constructed on the site. One restroom would be located near the fishing dock/paddle craft launch; the other two would be located adjacent to parking areas. The restrooms would be ADA accessible, with flush toilets, sinks, connected to municipal sewer and water and would be 200 square feet, 400 square feet, and 600 square feet in size, respectively.
8. **Two-Story Overlook Structure with Screened-in Lower Level.** Near the intersection of the Bay with McKitchen's Bayou in the northwest corner of the site and approximately 75 feet from the shoreline, a two-story open air overlook with a screened in room on the first floor would be constructed. This wood structure would have a footprint of approximately 50 feet by 50 feet and would be constructed on a concrete slab or on posts. The structure would have stairs and would be ADA accessible.
9. **Bayou Boardwalk.** Along McKitchen's Bayou, approximately 300 linear feet of wooden boardwalk would be constructed on the northwest edge of the property, pilings may be used to support the off-grade boardwalk but these would not be in wetlands or in water.
10. **Stormwater Treatment pond (as-needed).** Adjacent to the three gravel parking areas in the northwestern part of the site, stormwater ponds would be constructed if needed, pending engineering designs and calculations of stormwater runoff.
11. **Future Secondary Access Road.** The plan identifies an area for a potential secondary access road on the southwestern portion of the site that would connect with the primary access road if the adjacent property is developed for residential housing in the future and if the City or adjacent landowner pays for the road.
12. **Maintenance and Storage Building.** A small wooden maintenance and storage building would be constructed in an inland area of the site, with a footprint of approximately 1200 square feet.
13. **Parking Lot (Gravel Surface for approximately 65 spaces).** An ADA accessible parking lot would be constructed of gravel for 65 visitors covering 22,000 square feet. ADA accessible parking spots would be concrete with stabilized subgrade.
14. **Natural Playground.** A playground would be installed in an open area of approximately 300 feet by 100 feet in size. Generally, structural features would be comprised of natural (i.e., wood) materials and/or durable composite materials.
15. **Outdoor Classroom Facility with Restrooms and Bayou Deck.** Near McKitchen's Bayou and connected via boardwalk to the Bayou Fishing Dock, an open air/covered outdoor classroom facility would be constructed with restrooms and an outdoor deck. The footprint of this wood structure would be approximately 2,400 square feet.
16. **Bayou Fishing Dock.** Within McKitchen's Bayou, a small fishing dock would be constructed. The Fishing dock would be approximately 120 feet long, with a platform of approximately 20 feet by 20 feet at its waterward terminus. Dock construction would include placement of new pilings (two approximately 8" pilings for every 10 feet of dock) using the least invasive techniques given substrate and construction cost considerations, e.g., jetting, pushing, or driving the piles.
17. **Parking Lot (Gravel Surface for approximately 110 spaces).** An ADA accessible parking lot would be constructed of gravel for 110 visitors covering an area of approximately 135,000 square feet (not all of which would be gravel). ADA accessible parking spots would be concrete with stabilized subgrade.
18. **Large picnic pavilion that seats approximately 30 people.** One large (900 square foot) picnic pavilion would be constructed on the north side of the site. This open air pavilion would be wood construction over a concrete slab.
19. **Longleaf Pine Restoration.** An approximately two-acre area in the northeastern portion of the site is proposed to be restored and maintained as longleaf pine habitat with wire grass understory.

20. **Conservation Areas.** Approximately 50 acres of the 91 acre site would be maintained as conservation areas. These areas would be maintained in a natural condition.
21. **Wildlife Viewing Station.** In the southern portion of the site, a small wildlife viewing station would be constructed along the trails in the conservation areas. This wooden structure would be approximately 200 square feet or less.
22. **Fitness Trail Loop throughout Site.** On natural trails (i.e., no trail material, just cleared paths), a guided (via signage) fitness trail loop would be created. Trails would be constructed via minimal removal of vegetation and maintained via foot traffic and additional vegetation clearing as-needed.
23. **Bayou Dock with Paddle Craft Access.** On the Bayou, a floating wooden fishing/paddle dock would be constructed of approximately 100 feet in length, pending additional submerged aquatic vegetation surveys and consultations. Dock construction would likely include placement of new pilings (two approximately 8" pilings for every 10 feet of dock) using the least invasive techniques given substrate and construction cost considerations, e.g., jetting, pushing, or driving the piles.
24. **Parking Lot (Gravel Surface for approximately 30 spaces) and Disc Golf Course.** An ADA accessible parking lot would be constructed of gravel for 30 visitors covering an area of approximately 300 feet by 50 feet. ADA accessible parking spots would be concrete with stabilized subgrade. A disc golf course would also be constructed in this area (minimal construction for this; consists primarily of installation of signage marking holes and small metal or durable baskets).
25. **Main Entry for Vehicular Traffic.** A new entrance to the site would be cleared for an access road. The road would be constructed along existing open dirt roads where possible and avoid wetlands whenever possible. The road would run across the site east to west, and would connect the parking lots and paddle craft drop off loop.

Additional site elements not explicitly labeled in the conceptual master plan include:

- **Concrete sidewalks in the northwest area of the park.** The proposed project would construct ADA accessible concrete sidewalks (five feet wide and four inches deep covering an area approximately 21,800 square feet) primarily adjacent to ADA parking spaces, in the northern area of the park.
- **Lighting.** Site lighting would be comprised of two low voltage accent lights at the entry sign, 18 pole lights at the central access road, an additional 12 pole lights at parking areas, and 50 solar lights along wood boardwalks. Lights acting as emergency or safety lights may be operational during the day and night. All lighting would be low-glare, wildlife friendly, and comply with the guidance provided in the current edition of the FWC's Wildlife Lighting Criteria.
- **Access Road.** Project funds would be used to pay for a portion of the construction costs to build McKitchen's Bayou an access road and culvert bridge to the property providing access to a public right-of-way adjacent to Deer Point Elementary School. The access road to be constructed leading to the proposed park will be a two lane paved road, approximately 22-24' wide, with one culvert bridge over a small unnamed creek. It appears that typical flow of the creek at the crossing point is minimal. The current dirt access road crosses the creek without any structure in place to cross. Following storm events, the bankfull width could be approximately five feet wide. The culvert design is not finalized, but could be a standard rounded culvert.
- **General site furnishing.** Site amenities would include four wood arbor bench swings, 21 trash receptacles, 16 benches (to be placed at the open air pavilions and outdoor classroom), one disc golf course, and 24 picnic tables at pavilions. The site would also contain one sign at the park

entrance, five informational and park way-finding signs, and twenty interpretive signs throughout the park.

- **Additional site work.** Additional work would include modifying existing electric service, connecting to the currently existing municipal sewer system and likely construction of lift station(s), fire hydrant assembly and accompanying water main work, site grading (as necessary), and erosion control efforts during construction. General landscape development would include invasive species removal, hardwood tree maintenance, native plantings, and an irrigation system near the park entry and park core, and landscape drainage.

Final engineering and design plans for the proposed site improvements would be completed following further environmental resource surveys and consultations with state and federal agencies; proposed site improvements may be modified to avoid and/or minimize potential impacts to natural resources.

Installation of the proposed site improvements is estimated to take 12-15 months; construction of an offsite public road to access the property is anticipated to add three months to the project timeframe. Staging of equipment and materials would likely be located on the property where parking lots would be constructed (according to the conceptual plan), or on previously disturbed areas of the site.

Construction equipment would include a combination of hand-held or power tools for carpentry work as well as heavier construction equipment such as bulldozers, barges, trucks, backhoes, tractor trailers, cranes, small excavators, fork lifts, asphalt machine, roller, or generators. Construction would require the transport of materials to project sites. The number of trips required to transfer materials would be based on the amount and type of materials needed for site improvements. These details would be determined as part of the final construction design and plan.